

REMARKS/ARGUMENTS

Original claims 1 through 56 have been canceled in favor of new claims 57 through 94. Original claims 1 through 24 and 37 through 51 were directed to a nonelected invention pursuant to a restriction requirement. Therefore, claims 1 through 24 and 37 through 51 are canceled without prejudice or disclaimer, preserving Applicants' right to pursue these claims in a subsequently filed division application(s). The subject matter recited in original claims 25 through 36 is now recited in new claims 57 through 88. The subject matter recited in original claims 52 through 56 is now recited in new claims 89 through 94. Applicants respectfully submit that no new matter is presented in new claims 57 through 94.

The Office Action (Action) objects to claim 36 because the phrase "electroless plating solution" lacks antecedent basis. Applicants respectfully submit that claim 36 has been canceled by this amendment, thus rendering the objection moot.

Claims 52 through 56 stand rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 3,629,922 to Miller et al. (Miller).

Miller describes plastics that are plated with metals by pretreatment of the entire plastic surface with a phosphorous compound followed by contacting the treated surface with a metal salt or complex thereof. The entirety of the resultant surface is capable of being electroplated by conventional techniques.

New independent claim 89 corresponds to original claim 52 and recites an article of manufacture comprising a substrate having a metal coating over portions of the substrate in a selected pattern and being bonded to the substrate through an intermediate layer of catalyzed ligating chemical agent.

Applicants respectfully submit that Miller fails to anticipate the claimed invention in that Miller clearly fails to disclose an article of manufacture comprising a substrate having a metal coating over portions of the substrate in a selected pattern, as recited in claim 89. Nowhere in Miller is such a feature disclosed, and in fact, the plastic articles of Miller have their entire surface coated, as exemplified in their Examples 1 through 8.

Therefore, Applicants respectfully submit that claim 89, as well as claims 90 through 94 dependent therefrom, are patentably distinguishable over Miller. As such, reconsideration and withdrawal of the §102(b) rejection is respectfully requested.

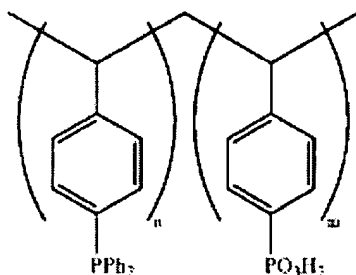
Claims 25 through 27, 34 and 35 stand rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 6,183,545 to Okuhama et al. (Okuhama).

Okuhama describes aqueous solutions for the reductive deposition of metals. As noted above new claims 57 through 88 correspond to original claims 25 through 36, and as such are discussed below.

New claim 57 recites a method of rendering a substrate catalytic to electroless metal deposition comprising the steps of: (a) depositing a ligating chemical agent on the substrate, which is capable of both binding to the substrate and ligating to an electroless plating catalyst; and (b) ligating the electroless plating catalyst to the ligating chemical agent. The ligating chemical agent is a bifunctional molecular species of the form $R_7R_8P(CH_2)_nPO_3R_9R_{10}$, wherein n is between 1 and 20, and wherein R_7 and R_8 are substituted or unsubstituted alkyl groups, substituted or unsubstituted aryl groups, or substituted or unsubstituted heterocyclic groups, and may be the same or different, and wherein R_9 and R_{10} are hydrogen atoms.

Claim 57 recites the feature of original claim 28, which was indicated as not being anticipated by Okuhama in the Action's §102(b) rejection. Therefore, Applicants respectfully submit that claim 57, as well as claims 58 through 64 dependent therefrom, are not anticipated by Okuhama.

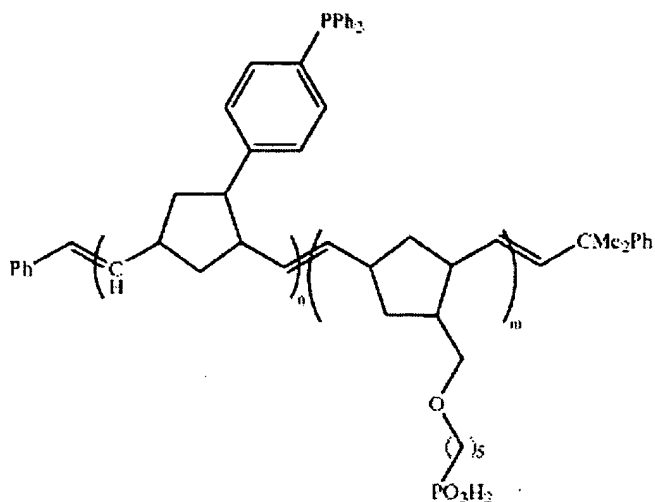
New claim 65 recites a method of rendering a substrate catalytic to electroless metal deposition comprising the steps of: (a) depositing a ligating chemical agent on the substrate, which is capable of both binding to the substrate and ligating to an electroless plating catalyst; and (b) ligating the electroless plating catalyst to the ligating chemical agent. The ligating chemical agent has the chemical structure:



Claim 65 recites the feature of original claim 29, which was indicated as not being anticipated by Okuhama in the Action's §102(b) rejection. Therefore, Applicants respectfully submit that claim 65, as well as claims 66 through 72 dependent therefrom, are not anticipated by Okuhama.

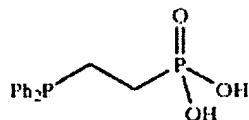
New claim 73 recites a method of rendering a substrate catalytic to electroless metal deposition comprising the steps of: (a) depositing a ligating chemical agent on the substrate, which is capable of both binding to the substrate and ligating to an electroless plating catalyst; and (b) ligating the

electroless plating catalyst to the ligating chemical agent. The ligating chemical agent has the chemical structure:



Claim 73 recites the feature of original claim 30, which was indicated as not being anticipated by Okuhama in the Action's §102(b) rejection. Therefore, Applicants respectfully submit that claim 73, as well as claims 74 through 80 dependent therefrom, are not anticipated by Okuhama.

New claim 81 recites a method of rendering a substrate catalytic to electroless metal deposition comprising the steps of: (a) depositing a ligating chemical agent on the substrate, which is capable of both binding to the substrate and ligating to an electroless plating catalyst; and (b) ligating the electroless plating catalyst to the ligating chemical agent. The ligating chemical agent has the chemical structure:



Claim 81 recites the feature of original claim 31, which was indicated as not being anticipated by Okuhama in the Action's §102(b) rejection. Therefore, Applicants respectfully submit that claim 81, as well as claims 82 through 88 dependent therefrom, are not anticipated by Okuhama.

In view of the above, Applicants respectfully submit that claims 57 through 88 are patentably distinguishable over Okuhama. Therefore, reconsideration and withdrawal of the §102(b) rejection is respectfully requested.

Claims 25 through 36 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Okuhama in view of Miller.

Okuhama and Miller are summarized above. Again, new claims 57 through 88 correspond to original claims 25 through 36 and are summarized above.

Applicants respectfully submit that the Action fails to present a *prima facie* case of obviousness. To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally,

the prior art reference (or references when combined) must teach or suggest all of the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on Applicant's disclosure. In re Vaeck, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

Applicants respectfully submit that Okuhama and Miller, taken alone or in combination, fail to teach or suggest all of the claimed limitations. As noted above, Okuhama fails to disclose or suggest the methods having the recited ligating chemical agents set forth in claims 57, 65, 73 and 81. Miller clearly fails to cure these deficiencies of Okuhama, in that Miller also fails to disclose or suggest the claimed methods requiring the recited ligating chemical agents, as set forth in claims 57, 65, 73 and 81.

The Action further attempts to cure the deficiencies of these references by suggesting that a statement made by Applicants, namely "Phosphonic acids are known to bond covalently to many oxide surfaces...", renders the claimed invention obvious in view of the cited patents. Clearly, this statement also fails to disclose or suggest the claimed ligating chemical agents recited in claims 57, 65, 73 and 81. Therefore, even in combination with the cited patent, one still fails to arrive at the claimed invention.

It is only through Applicants disclosure that one can arrive at the claimed invention. The Action, in hindsight based on Applicant's specification, erroneously attempts to combine bits and pieces of the reference disclosures in an attempt to arrive at the claimed invention. "The invention must be viewed not after the blueprint has been drawn by the inventor, but as it would have been perceived in the state of the art that existed at the time the invention was made." Sensonics, Inc. v. Aerosonic Corp., 38 USPQ 2d 1551, 1554 (Fed. Cir. 1996), citing Interconnect Planning Corp. v. Feil, 774 F.2d 1132, 1138, 227 USPQ 543, 547 (Fed. Cir. 1985).

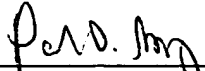
In view of the above, Applicants respectfully submit that claims 57, 65, 73 and 81, as well as all claims dependent therefrom, are patentably distinguishable over Okuhama and Miller, taken alone or in combination. Accordingly, reconsideration and withdrawal of the §103(a) rejection is respectfully requested.

Applicants respectfully submit that claims 57 through 94 are patentably distinguishable over the cited patents taken alone or in combination. Therefore, reconsideration and withdrawal of all of the rejections and passage of this application to allowance is respectfully requested.

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Respectfully submitted,



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